FROEBEL TRUST

GUIDANCE FOR PRACTITIONERS ON DIGITAL DOCUMENTATION

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Contents

RESEARCH

Documenting children's learning in today's world

Observing and documenting young children's learning has a long and rich heritage in early childhood education and care (ECEC), and is central to every early childhood educator's practice. Keen observation of children at play is vital for educators to make sense of children's interests and interactions, and informs their planning and pedagogy.

Educators are experienced in documenting children's play using pen and paper, often co-creating collections of observations that can be shared with parents. These 'learning journals' or 'portfolios' usually feature examples of a child's drawing and early writing, photographs of a child playing and things a child has made, as well as written comments noted by practitioners. However, while young children carry on playing as they always have, the tools, practices and contexts for observation and documentation have changed significantly over recent years.

First, educators are under increased pressure to measure individual children's learning across narrowly-defined developmental stages, yet these fail to acknowledge the holistic nature of children's complex learning journeys. Prescribed developmental milestones may be particularly inappropriate in the assessment of young children who are living with disadvantage, children from ethnic and linguistic minority backgrounds, or children who have recently immigrated and are just beginning to adjust to life in a new country where they struggle to make sense of their new environment.

Second, educators are now faced with a range of digital systems to document children's learning. Digital documentation systems are marketed as tools that can simplify early childhood record-keeping and assessment, and they are becoming widely used. For example, the online learning journal 'Tapestry' (https://tapestry.info) reports that it has been used to record more than fifty million observations for over eight hundred thousand children across more than fifteen thousand settings (Tapestry 2018 – figures correct as of 19th October 2018), and the '2Build a Profile' (http://www.2simple.com/2buildaprofile) system is reportedly adopted by over 100 new settings every week (2Eskimos, 2016). These digital systems can be used on Smartphones and tablets, making it possible to record observations 'on the go' and 'in the moment'. Unlike paper-based documentation, video clips and audio recordings can be combined with photographs and written notes.

Digital systems clearly differ from paper-based systems in several important ways. However, there are limited ECEC training resources and guidance considering how to use digital documentation effectively. The most comprehensive information for practitioners is provided in the marketing materials produced by digital documentation companies, which lack a balanced, impartial and theoretically founded basis. Our aim in this Guidance is to help practitioners reflect on how they might use digital documentation in ways that help to capture the magic and wonder of young children's learning, and how this might be shared with children and parents.

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Digital Documentation: A balanced view

Our research findings suggest that digital documentation offers new possibilities to document children's learning in ways that recognise and value what they choose to do, particularly during child-initiated play. Recognising learning is complex because children demonstrate their understanding in many different ways, such as through their drawing, model-making, dance, storytelling and role-play.

There are also less tangible expressions of meaning-making, such as the silent and ephemeral ways that children solve problems, find creative solutions and negotiate interaction. These more subtle signs of learning may all too readily be overlooked or dismissed unless educators intentionally use observation and documentation approaches that capture the contributions and capacities of all learners, in multiple forms. Our research found that digital video recordings of children's play helped practitioners to notice and reflect on children's learning in new ways. This was particularly the case for children who practitioners identified as being harder to observe, and who tended to have fewer observations. This finding suggests that digital documentation can help to identify and highlight signs of learning that may be hard to capture in written notes.

The combination of photographs, short video extracts, sound clips and writing invites new possibilities for *what gets represented*, in *what form*, and *to what effect*. For example, the dynamism and joy of children's activity (whether running outdoors, skipping, drawing a picture or writing) can be captured in different media to celebrate their accomplishments. Moments of play can be captured in short video or audio clips, alongside photographs and commentaries written by educators.

There are also implications for *who documents learning* and *who has access to children's records of learning*, as digital documentation can be shared both directly and remotely with children's families. Parents can be encouraged to create their own notes, photographs and video or audio clips at home, to share these with a setting digitally, and to comment on their child's classroom-based experiences. The audio-visual possibilities of digital documentation also present new possibilities for sharing record-keeping with young children themselves in ways that are more accessible to them than writing. For example, children can review video clips of their play, and their comments on their own play can be audio recorded.

However, as well as identifying potential advantages of digital documentation, it's important to think about the challenges and shortcomings. For example:

- Cost
There are financial implications to digital documentation, as systems typically require an annual subscription in addition to hardware costs for devices like iPads, so schools and early years settings need to make informed decisions before investing.

- Training
It is likely that some practitioners will lack confidence in using digital technology and may require support or training. Some practitioners in our study had previously lost digital records of children's learning due to errors or technical glitches, and this had been disheartening. Every setting needs to identify how training might help overcome these issues, what is feasible, what devices would be most (or least) useful, and reflect on how using digital documentation will blend with existing observation and documentation practices.

- Time

Changing systems can be time-consuming, and whilst digital technology may speed up some aspects of documentation eventually, it can take a while to become familiar with new systems. Although digital documentation markets itself as a timesaving device, it is also worth ensuring that speed does not come at the expense of time for careful reflection on children's learning. In our study, practitioners mentioned they found it time-consuming to make video observations and then re-watch material, but they found it particularly worthwhile for the slowed-down and close attention it offered, and the potential for sharing and reflecting on children's learning.

- Interactions

Some practitioners in our study were concerned about the possible negative impact of digital devices on their interactions with children, and mentioned that the design of some digital documentation systems placed a focus on specific curriculum learning outcomes that created tensions with enquiry-based approaches to early learning. Some practitioners were concerned about appearing on video themselves, partly due to issues of self-image, but also due to their concerns about the ethics of video recording. This suggests there is a fine line between observation and surveillance, for both adults and children, and these issues need to be discussed and considered carefully in every setting to ensure that digital documentation is used in ways that chime with each setting's ethos.

- Documentation Design

Recognising and valuing all children's diverse signs of learning is challenging when practitioners are required to focus on measuring children's performance against normative standards, such as those found in the Early Years Foundation Stage Profile and the benchmarks for Baseline Assessment. If digital systems emphasise summative assessment in their design, this will shape what gets recognised as learning. A further constraint of digital documentation systems is that many are designed for adults (practitioners and parents) and do not support children to access and contribute to their documentation themselves.

In response to these potentials and challenges, we encourage practitioners and settings to consider using digital documentation systems in ways that celebrate young children's playfulness, excitement and inventiveness, and that place the Froebel principles of the 'uniqueness of every child's capacity and potential' and the 'holistic nature of development' at the heart of their early years assessment practices. The recommendations below are designed to support and develop your digital documentation practice through reflective questions and tools for thinking.

# Recommendation 1: Reflect on your current documentation practices

We suggest that every setting begins by reflecting on *how* children's learning is currently observed and documented, and *who* and *what* documentation is for. In our study, we found that each setting had its own very special ethos, with particular goals and priorities that had changed over time. By coming together as a team to share your thoughts and review your current documentation practices, you may begin to think differently about how your current practices match your setting's ethos. Here are some questions to prompt your group reflection.

Question 1.1
Who is documentation for?

The following questions may help you to identify who you are producing your documentation for, and whether you feel you have achieved a good balance between children, staff and parents in terms of who creates and reads your records of each child's learning:

- What documentation format(s) do you use? (e.g. Paper-based, such as learning journeys/ journals/portfolios; Digital systems, such as Tapestry, 2BuildaProfile or Kinderly; Or a combination of paper and digital?)

- Who is invited to contribute to documentation? (Staff, children, parents?)

- How often are there opportunities for parents and children to view their documentation? How often are they invited to contribute to it?

- Where is the documentation stored? Can children access records of their learning independently? Can parents access their children's records without having to ask staff for permission? What opportunities do working parents (and parents/ main carers who are unable to visit the setting regularly) have to see their child's documentation?

- Can children and parents share documentation with the wider family? (Many settings prefer to keep children's documentation so it does not get lost. If this is the case, could some digital documentation help to bridge the home-school gap?)

- If you work with children from different social and cultural backgrounds, how are their unique experiences of family and community life reflected in their documentation?
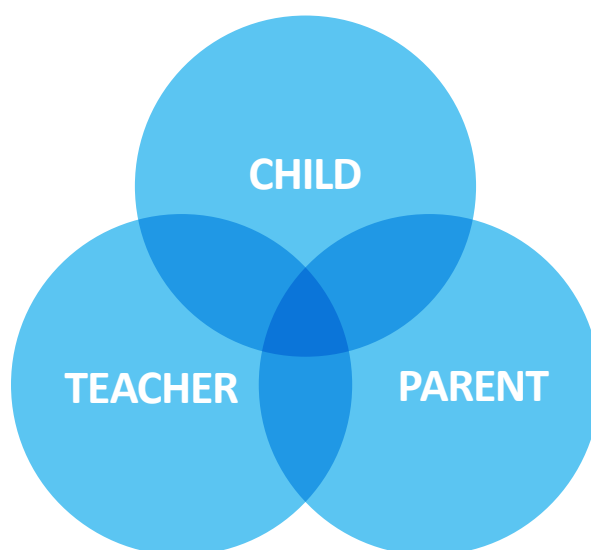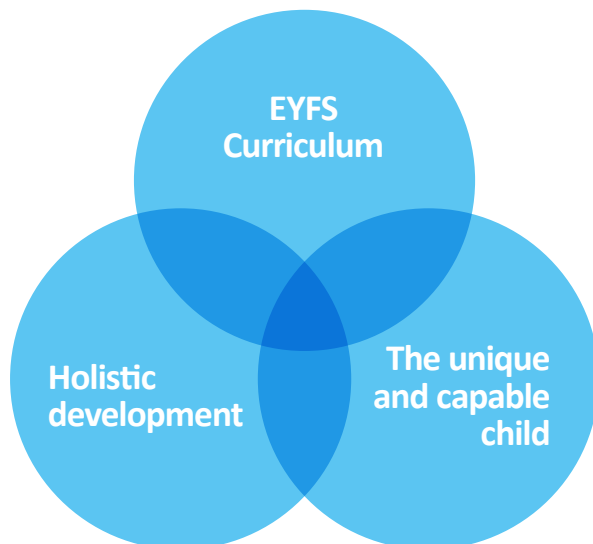

Tool for thinking 1.1
Draw circles to reflect who documentation is mainly for in your setting. Is there a good balance between staff, parents and children? Or is your 'teacher' circle bigger than the others? Are you happy with this?

Question 1.2 What is prioritised in documentation?

In our study, we found that practitioners believed in child-centred pedagogy, but felt this was often in tension with the summative assessment requirements of the EYFS Framework that is followed in England. The following questions aim to help you identify what is prioritised in your current documentation, so you can discuss if you would like to adjust the focus of your current practices:

• How is progress against the EYFS Profile noted? Is documentation used mainly for formative assessment, summative assessment, or a combination?

• Are comments made about children's unique strengths and interests? (For example, if languages other than English are spoken at home, are the child's other languages reflected and valued in their documentation?)

• Is there a balance between specific learning outcomes and each child's holistic learning?

• Is documentation mostly individual, or does it sometimes relate to groups and ongoing projects? Documentation of joint activity can give new insights into children's learning, friendships and sociability.

Tool for thinking 1.2
Draw circles to reflect what aspects of learning are prioritised in your setting's documentation. Is there an equal balance between the three aspects?

Question 1.3 Which children have the most documentation?

In our study, we asked educators about children who had fewer observations and children they might consider 'harder to observe'. The settings tended to have richer documentation records for children who talked confidently and spoke English fluently, who preferred playing indoors and 'quiet' activities, and who produced what the practitioners called 'work' (such as drawings, crafts etc). Practitioners said they found it harder to observe and document children who preferred physical play and spent lots of time playing outside, who did not communicate confidently in English, or who did not join in group activities or settle down to produce things that acted as traces of their learning (see Table 1 below). One educator reflected that "there seems to be a recurring theme that play that's not verbal is not as valued by the adult … we are not good at looking at what they are telling us without verbal communication".

Children with fewer observations	Children with more observations
• Quiet	• Highly verbal
• Shy	• Outgoing
• Not confident communicating in English	• Speak English fluently
• Spend lots of time outdoors	• Mainly play inside
• Run a lot / highly physical	• Like quiet / still activities
• Do not join group activities	• Join in group activities
• Do not produce 'work' (drawings etc.)	• Produce lots of 'work' (drawings, crafts etc.)
• Independent / do not come to adults often	• Dependent on adults / seek adult attention
• Many absences	• Few absences

Table 1: Which children have more observations of their play?

The following questions and suggestions may help you reflect on what signs of learning you find easier to document and which children's 'signs of learning' are more easily overlooked:

- Look through the documentation of children from different social and cultural backgrounds in your setting, as well as children who you view as confident and sociable, and children who you view as shy and who tend to play on their own. Is the documentation for some children more complete or more regular than for others?

- Can you identify the characteristics of children whose 'signs of learning' are more likely to go unnoticed in your setting?

- How might documentation practices in your setting change to recognize *all* children's signs of learning? Might video be helpful for capturing movement-based play? Could photographs help explore children's understandings that are not verbalized? Could more observations be conducted in a particular area of the setting, such as outdoors?

Tool for thinking 1.3
Try creating your own table of 'Children with fewer observations' and 'Children with more observations' for your setting, as shown in Table 1. Reflect together on which children's characteristics tend to attract your attention, and whose learning you tend to find it easier or harder to document. Why might this be? How could this change?

Recommendation 2: Reflect on the value of digital documentation

Practitioners in our study found that making short digital video recordings had great potential for observing and documenting children's play, and for giving value to aspects of play that might otherwise be overlooked. They also found that watching and discussing short video clips supported their reflection on children's learning, and informed their short and longer term plans for individual children, for groups of children and for whole group projects. Sharing digital video clips with children and parents helped to get the message across that *all* children's play is valued. Here are some suggestions and questions that will help you reflect on the potential of digital documentation for your setting.

Question 2.1 How can we make it easier to use digital documentation?

In our study, practitioners commented that it is challenging to have the right equipment for documentation easily to hand at the right moment, and this was the case for pens and notebooks as well as digital devices. This was a particular issue when observing play outside, when practitioners were likely to need their hands free in order to help children. Some practitioners were unsure how long to video for, and had concerns about how they would interpret video clips. The following suggestions and questions aim to help settings reflect on these issues:

Figure 1: One way to make iPads easily accessible

- How might you use video in your setting? It could be helpful to initially focus on a particular child, or an activity that you have found difficult to capture in words. For instance, one setting in our study used video to document a project about jumping.

- How can digital devices be made readily accessible to educators so they can record observations on-the-go throughout each session? One setting in our study bought a stand for their iPads, and cases with straps to encourage practitioners to take the iPads outdoors with them whilst still having their hands free to support the children. *(see Figure 1)*

- Can children be involved in taking photos or video themselves and looking at these together on the screen?

Question 2.2 How can we use digital documentation to plan for learning?

Many digital documentation systems, such as Tapestry (used widely in England) and Storypark (used widely in New Zealand), make it possible to add digital photographs and videos to children's online learning journals. Practitioners can also sometimes 'tag' observations of individual children and select links with statements from the curriculum, and written notes can then be added by practitioners and by parents. This can be time-saving for assessment purposes, and can be used to 'track' learning patterns across cohorts of children. Below are some comments about different ways that using video recordings and digital documentation can be helpful:

- Re-watching videos provides an opportunity to think differently about children's play, for instance, to concentrate attention on just one child in a group. One practitioner described the re-watching process as "having the time to think a bit more deeply". When talking about using video for reflective practice, one practitioner commented, "It just slows down your thinking to looking into what [the child is] actually doing, rather than, you know, in the moment you might not think about the detail". When you re-watch a video clip of children's play, what new details do you notice? What unspoken or subtle moments of learning are captured? How do your initial interpretations change? What do others see when you re-watch as a group?

- Video clips can be used for multiple purposes, and staff can make observations of group experiences as well as individual 'snapshot' observations. Many digital documentation systems invite you to 'tag' observations with particular children and particular curriculum statements. One setting in our study also 'tagged' observations relating to ongoing projects, to look at group learning as well as individual learning. When re-watching video clips, what learning is made visible? How do these insights also inform ongoing planning?

- Digital video has potential as a tool for practitioners to reflect on their own practice. For example, one practitioner commented during our study, "I've recorded myself during a structured session just to see how I'm questioning … it's quite helpful … it definitely made me more aware of the way I'm interacting with the children". In this way, video seemed to offer the practitioners a chance to reflect on their own practice in ways that are not always possible in the moment. When re-watching video clips of your interactions with children, what do you notice? How is your re-watching different to your experience at the time?

Question 2.3 How can we exchange digital documentation with parents?

We consulted parents during our study, and they all appreciated seeing documentation of their children's learning, whether paper-based or digital. They valued documentation as a way to be informed and to provide a lasting record of their child's time in early education, as one mother commented about her son's paper-based documentation, "I like everything I see inside the book. I feel happy to know what he has been doing in school ... and when the book is given to the parents at the end of the year, it makes joy for the whole family".

Digital documentation can be viewed by parents provided they have a suitable digital device, they have registered with the setting's software system and have a secure password to access their child's records. Parents are able to view observations featuring their child, add observations of their own, and comment on observations created by the setting.

Most parents found digital documentation more accessible than paper-based formats, because access to paper-based documentation was sometimes limited, such as during special events for parents and open evenings, or for a few hurried minutes when picking up their children at the end of the day. By contrast, they could access digital documentation whenever they wanted to, and review it for as long as they wanted to. One parent commented about her child's digital documentation, "I think it's a great system for bridging the gap between parents and nursery. It helps keep us in the loop". Practitioners also appreciated how they could share observations immediately with parents by using digital documentation software.

Parent perspectives added valuable insights for practitioners, yet most parents did not contribute to their children's documentation, irrespective of the format. The following suggestions and questions might help to prompt your own planning for parents' involvement in documenting their child's learning:

- Several parents in our study were reluctant to contribute to documentation because they thought settings wouldn't be interested in what they did at home. How might parents be reminded that their observations and comments matter?

- Think about different ways you can prompt parents to document children's interests and significant events at home, for example, by uploading photographs and short video clips, with some short written explanations or transcribing what children say about them. Can you show a few examples to give parents ideas of ways to contribute?

- Let parents know about any group/collaborative projects and make suggestions about how parents might talk about these at home with their children, sharing a few comments through digital documentation systems

- Remind parents that if they share digital documentation with their children at home, it can help children make connections with what they have done in nursery.

- Reassure parents that information about their child is secure, and that taking just a few minutes to share information about their child can really help to bridge the home-school divide. Reflect together about whether you can all answer parent questions about security and confidentiality in digital documentation systems.

Question 2.4 How can we share digital documentation with children?

Children are often very 'hands-on' when they review their documentation, particularly when it is paper-based. They enjoy stroking their fingers across pictures and artwork, turning pages back and forth, and rearranging pictures that have come loose. In our study, children took pride in looking through their documentation, and their pride was often demonstrated through subtle exchanges of glances and smiles between the children and the person sharing their documentation. This suggests that the children were enjoying seeing themselves and sharing this record.

Children also really enjoyed watching videos of themselves playing and sharing their digital documentation, and this prompted them to reflect on their own learning. However, most digital documentation systems are designed for adult use and do not currently facilitate children's independent access or encourage them to contribute to their own documentation. Here are some suggestions for supporting children's engagement with their documentation:

- Sharing documentation with young children is a valuable device for making children's learning visible, and for children to recall and reflect on their own learning. There are benefits in making children's documentation more readily and regularly accessible to them. How might you might make this possible in your setting?

- When co-viewing video clips or digital photographs with children, adults can prompt children's recall of the event. Photos and videos can also be used to prompt children's oral storytelling. For example, encouraging children to recount what happened in a video can help them to develop a sense of story and doing this over time can help them to begin to construct narratives. You can also learn a lot about children's feelings and friendships by talking with them about recordings of their play.

- With some digital software systems, it is possible to print extracts from child profiles for display in class. At the end of the child's time in the nursery, a printed PDF version of the child's profile can be given to families, with writing and still photographs.

- Digital documentation systems are typically designed for adults, so children may need support viewing them. Can you help children to navigate through their observations, allowing them to choose which to revisit? Can you read some of the educators' comments to show that adults are interested in the things the children do and value children's playful learning? Can you audio record or scribe the child's response so that their voice is part of the documentation too?

What next?

As digital documentation becomes a bigger and bigger part of ECEC practice, educators will need to reflect carefully on its potentials, pitfalls and limitations.

We hope that this research-informed guidance has prompted your critical reflection on your own practice, and that it is useful in suggesting how to use digital documentation in ways that can help to embed Froebelian principles of 'valuing the holistic nature of development' and 'the uniqueness of every child's capacity and potential' in your practice.

Footnote

This guidance is based on findings from a rigorous research study, which was generously funded by The Froebel Trust. The recommendations are based on theories of early learning that reflect the Froebel Trust principles of valuing the uniqueness of every child's capacity and potential, and the holistic nature of development. In the study, we worked closely with practitioners in three urban settings, which were all rated by Ofsted as 'good' or 'outstanding' and were located in areas of disadvantage. During this study, we focused particularly on children aged 3-5 years who practitioners identified as being from socially and /or economically disadvantaged homes and/or were in the early phases of learning English. Our aim was to work with each setting to develop new ways of using digital documentation that recognise and value *all* children's signs of learning. We also explored how settings might share digital documentation with children and their families.

For more information about the study and its findings, see:
www.froebel.org.uk/research-library/4ps-project/valuing-young-children-s-signs-of-learning-observation-digital-documentation-of-play/

This research was conducted by Dr Kate Cowan (UCL Institute of Education) and Professor Rosie Flewitt (Founding Co-director of the Helen Hamlyn Centre for Pedagogy, UCL Institute of Education). Professor Flewitt has now moved to the Education and Social Research Institute, Manchester Metropolitan University.
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